 E-5021

MEMORANDUM TO THE FILE 24 July 1957

FROM: [redacted] 25X1A9A

SUBJECT: Trip Report - [redacted] 25X1A5A1

On 22 July 1957, [redacted] proceeded to the [redacted] 25X1A9A 25X1A5A1 [redacted] 25X1A5A1 During the morning of 23 July discussions were held on their Research and Development program on Direction Finder equipments. That afternoon a tour of their test site was taken and some of the equipment was demonstrated. To [redacted], I was a representative of the Central Intelligence Agency. 25X1A5A1

The Equipments discussed were:

AN/TRD-4 High Frequency Radio Direction Finding Set

This unit, which is the standard HF - RDF for the military with the exception of Navy, is to be improved during Fiscal Year 1958. The improvements will consist of better accuracy and sensitivity, and provisions for more than one operator position output from the antenna system. [redacted] said he belives that this set is commeri- 25X1A5A1 cally available with remote operation features.

AN/TRD-15 High Frequency Radio Direction Finding Set

This set uses the Doppler principle and is very much along the same lines as the expermental models of the AN/TRD-8 which has been dropped from development by the Air Force. The improvements over the AN/TRD-8 which they are striving for are: a practical antenna commutator assembly employing a motor-driven electro-magnetic antenna switching transformer, improvements on data extraction circuits, improved filtering of data signal, and improved Human Engineering requirements for the equipment console. Developmental progress along these lines has been satisfactory. Servo Corporation of America should have this equipment ready for a test at their plant test site by the end of August. The expermental model is scheduled to be set up at [redacted] for demonstration around the end of September in con- 25X1A5A1 junction with an informal symposium on DF equipments and its operation.

AN/TRD-10 Very High Frequency Radio Direction Finding Set

This set is to be modified for greater sensitivity and extended frequency coverage. The nomenclature will be changed to the AN/TRD-16.

E-5021

17 JUL 1957

MEMORANDUM TO THE FILE

25X1A9A

FROM: [redacted]

SUBJECT: Air Force DF Equipment

1. On July 17, 1957, Messrs. [redacted] 25X1A9A made a trip to Andrews Air Force Base to discuss Air Force DF equipment. The Air Force employee interviewed was Mr. R. J. Messmer, AACS, Navigational Aids, R&D Section, Building T-41. To Mr. Messmer we were representatives of CIA.

2. Mr. Messmer said that the Air Force's primary interest at the present time is with the UHF DF equipment (225-400 mc.). He also said that the AN/TRD-4 HF and AN/URD-2 VHF were the standard DF equipments for the Air Force in these ranges.

3. The equipments that were discussed are the following:

HF RANGE:

AN/CRD-2	.54 to 30 mc.	Superseded by the AN/TRD-4
SCR-291	2 to 10 mc.	Superseded by the AN/CRD-2
AN/TRD-4	.54 to 30 mc.	Standard
AN/TRD-8	.54 to 30 mc.	Doppler System, Project dropped by the Air Force.

VHF RANGE:

AN/URD-2	100 to 200 mc.	Standard

UHF RANGE:

AN/CRD-6	225 to 400 mc.	
AN/FRD-2	225 to 400 mc.	
AN/FRD-5	225 to 400 mc.	STANDARD EQUIPMENTS, BASICALLY RELATED, Homing Use Only
AN/FRD-6	225 to 400 mc.	
AN/FRD-7	225 to 400 mc.	
AN/GRD-9	225 to 400 mc.	Wullenweber System, general purpose use.
AN/GRD-11	225 to 400 mc.	Doppler System, under development.

4. With the exception of the AN/TRD-4 the equipments discussed did not seem suitable for our requirements. The AN/TRD-4 HF RDF seems to be the standard for all of the military with the exception of Navy.

25X1A9A

[redacted]